

-continued

## ( 2 ) INFORMATION FOR SEQ ID NO:105:

( i ) SEQUENCE CHARACTERISTICS:  
 ( A ) LENGTH: 9 amino acids  
 ( B ) TYPE: amino acid  
 ( D ) TOPOLOGY: linear

( i i ) MOLECULE TYPE: peptide

( x i ) SEQUENCE DESCRIPTION: SEQ ID NO:105:

Thr Leu His Glu Tyr Met Leu Asp Leu  
 1 5

## ( 2 ) INFORMATION FOR SEQ ID NO:106:

( i ) SEQUENCE CHARACTERISTICS:  
 ( A ) LENGTH: 9 amino acids  
 ( B ) TYPE: amino acid  
 ( D ) TOPOLOGY: linear

( i i ) MOLECULE TYPE: peptide

( x i ) SEQUENCE DESCRIPTION: SEQ ID NO:106:

Leu Leu Met Gly Thr Leu Gly Ile Val  
 1 5

## ( 2 ) INFORMATION FOR SEQ ID NO:107:

( i ) SEQUENCE CHARACTERISTICS:  
 ( A ) LENGTH: 8 amino acids  
 ( B ) TYPE: amino acid  
 ( D ) TOPOLOGY: linear

( i i ) MOLECULE TYPE: peptide

( x i ) SEQUENCE DESCRIPTION: SEQ ID NO:107:

Thr Leu Gly Ile Val Cys Pro Ile  
 1 5

What is claimed is:

1. A preparation of microparticles, each of which comprises a polymeric matrix and nucleic acid, the polymeric matrix consisting essentially of one or more synthetic polymers having a solubility in water of less than about 1 mg/l, wherein

at least 90% of the microparticles have a diameter less than about 100 microns, and

the nucleic acid is an expression vector selected from the group consisting of RNA molecules, at least 50% of which are closed circles; and circular plasmid DNA molecules, at least 50% of which are supercoiled.

2. A microparticle less than about 20 microns in diameter, comprising:

a polymeric matrix consisting essentially of one or more synthetic polymers having a solubility in water of less than about 1 mg/l; and

nucleic acid molecules, at least 50% of which are supercoiled DNA.

3. The microparticle of claim 2, wherein the polymeric matrix is biodegradable.

4. The microparticle of claim 2, wherein the polymeric matrix consists essentially of one synthetic, biodegradable copolymer.

5. The microparticle of claim 4, wherein the copolymer is poly-lactic-co-glycolic acid (PLGA).

6. The microparticle of claim 2, wherein the microparticle has a diameter of less than about 11 microns.

7. The microparticle of claim 2, wherein the nucleic acid molecule comprises an expression control sequence operatively linked to a coding sequence.

8. A microparticle less than about 20 microns in diameter, comprising:

a polymeric matrix; and

a nucleic acid molecule comprising an expression control sequence operatively linked to a coding sequence encoding an expression product comprising a polypeptide at least 7 amino acids in length, said polypeptide having the sequence of (a) a fragment of a naturally-occurring mammalian protein or (b) a fragment of a naturally-occurring protein from an infectious agent which infects a mammal, wherein the expression product includes (i) part but not all of the naturally-occurring mammalian protein or (ii) part but not all of the naturally-occurring protein from an infectious agent.

9. The microparticle of claim 8, wherein the polypeptide is immunogenic.

10. The microparticle of claim 8, wherein the expression product (1) comprises an amino acid sequence of a naturally occurring peptide recognized by a T cell; (2) is recognized by the T cell; and (3) alters the cytokine profile of the T cell.